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(54) Title: **METHOD OF REMOVING IMPURITIES FROM METALLURGICAL GRADE SILICON TO PRODUCE SOLAR GRADE SILICON**

(57) Abstract: Metallurgical grade silicon is purified by removing metallic impurities and non-metallic impurities. The object is to produce a silicon species that is suitable for use as solar grade silicon. The process involves grinding metallurgical grade silicon containing metallic and non-metallic impurities to a silicon powder consisting of particles of silicon having a diameter of less than about 5 millimeter. While maintaining the ground silicon powder in the solid state, the ground silicon powder is heated to a temperature less than the melting point of silicon (1410 °C) under reduced pressure. The heated ground silicon powder is maintained at that temperature for a period of time sufficient to enable at least one metallic or non-metallic impurity to be removed from the metallurgical grade silicon.